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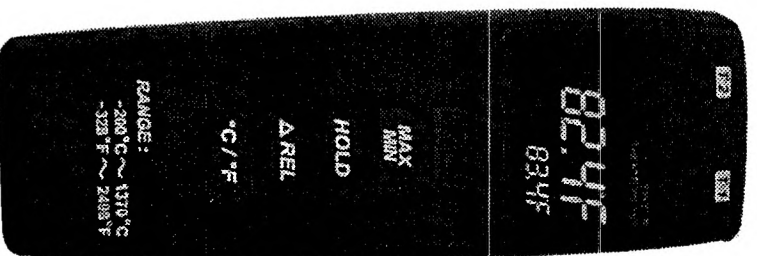
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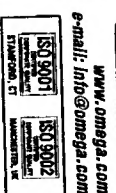
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M3657 / (N01)



User's Guide

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OMEGAETTE™ HH308
Type K Thermometer

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THEMOMETER

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I. Introduction:

This instrument is a digital thermometer for use with any K-type thermocouple as temperature sensor. Temperature indication follows National Bureau of Standards and IEC584 temperature/voltage table for K-type thermocouples.

II. Specifications:

Numerical Display:

4 digital liquid crystal display

Measurement Range:

-200°C ~ -137.0°C -328°F ~ 2498°F

Resolution:

-200°C ~ 200°C 0.1°C ; 200°C ~ 1370°C 1°C

-200°F ~ 200°F 0.1°F ; 200°F ~ 2498°F 1°F

Maximum Voltage at Thermocouple Input:

60V DC, or 24Vrms AC

Environmental:

☐ Operating Temperature and Humidity:

0°C ~ 50°C (32°F ~ 122°F) ; 0 ~ 80% RH

☐ Storage Temperature and Humidity:

-10°C to 60°C (14°F ~ 140°F) ; 0 ~ 80% RH

☐ Altitude up to 2000 meters.

Sample Rate: 0.6 times per second

Dimension: 164×54×34mm

Weight: Approx. 180g

Accessory:

K Type Bead Probe, Battery, Instruction Menu

Power requirement:

9 Volt Battery, NEDA 1604 or JIS 006P or IEC6F22

Battery Life:

Approx. 150hrs with alkaline battery

Accuracy: at (23 ± 5°C)

Range	Accuracy
-200°C ~ 200°C	±(0.3% reading + 1°C)
200°C ~ 400°C	±(0.5% reading + 1°C)
400°C ~ 1370°C	±(0.3% reading + 1°C)
-328°F ~ -200°F	±(0.5% reading + 2°F)
-200°F ~ 200°F	±(0.3% reading + 2°F)
200°F ~ 400°F	±(0.5% reading + 2°F)
400°F ~ 2498°F	±(0.3% reading + 2°F)

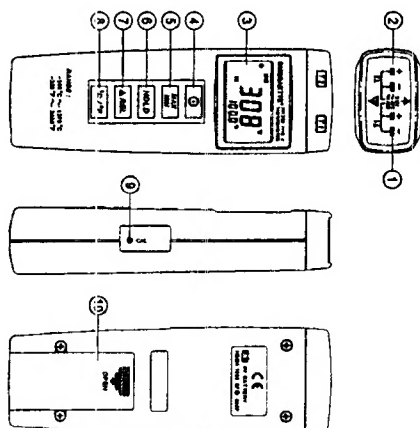
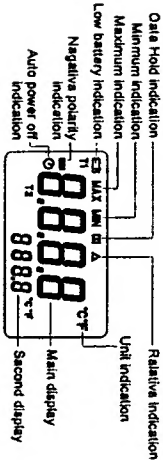
Temperature Coefficient:

For ambient temperatures from 0°C ~ 18°C and 28°C ~ 50°C, for each °C ambient below 18°C or above 28°C add the following tolerance into the accuracy spec.

0.01% of reading + 0.03°C
(0.01% of reading + 0.06°F)

Δ Note:

The basic accuracy Specification does not include the error of the probe please refer to the probe accuracy specification for additional details.

III. Symbol Definition and Button Location:

- ① T1 K type temperature sensor connector
- ② T2 K type temperature sensor connector
- ③ LCD display
- ④ ON/OFF button
- ⑤ MAX MIN Average control button
- ⑥ HOLD button
- ⑦ Relative readout button
- ⑧ °C, °F control button
- ⑨ Offset calibration screw
- ⑩ Battery cabinet cover

IV. Operation Instructions:

4.1 Power-Up

Press the \odot key to turn the thermometer On or OFF.

4.2 Connection the Thermocouples

For measurement, plug the thermocouple into the input connectors.

4.3 Selecting the Temperature Unit

When the meter was power on, the default unit is Celsius ($^{\circ}\text{C}$) scale. The user may change it to Fahrenheit ($^{\circ}\text{F}$) by pressing " $^{\circ}\text{C}/^{\circ}\text{F}$ " button and vice versa to Celsius.

4.4 Data-Hold Operation

The user may hold the present reading and keep it on the display by pressing the "HOLD" button. When the hold data is no longer needed, one may release the data-hold operation by pressing "HOLD" button again. When the meter is under Data Hold operation, the " ΔREL ", "MAX/MIN and " $^{\circ}\text{C}/^{\circ}\text{F}$ " button are disabled.

4.5 Relative Operation:

When one press the " ΔREL " button, the meter will memorize the present reading and the difference between the new reading and the memorized data will be shown on the display. Press the " ΔREL " button again to exit the Relative operation.

4.6 MAX/MIN Operation:

When one press the MAX/MIN button the meter will enter the MAX/MIN mode. Under this mode the maximum value and minimum value is kept in the memory simultaneously and updated with every new data.

When the MAX symbol is display, the Maximum is shown on the display.

Press MAX/MIN again, then the MIN symbol is on the display and also the minimum reading.

Press MAX/MIN again, MAX, MIN will blink together. This means that all these data is updated in the

memory and the reading is the present temperature. One may press MAX/MIN to circulate the display mode among these options.

When the meter is under MAX/MIN operation, " ΔREL " and " $^{\circ}\text{C}/^{\circ}\text{F}$ " are disabled.

To exit the MAX/MIN mode, one may press end hold MAX/MIN for two seconds.

4.7 Auto Power Off:

By default, when the meter is powered on, it is under auto power off mode. The meter will power itself off after 30 minutes if no key operation is performed. Key combination at power on can disable auto power off. One may press and hold "HOLD" button and then power on the meter and auto power off symbol will disappear to indicate that auto power off is disabled.

4.8 Low Battery Condition

When the battery voltage is under proper operation requirement, the E3 symbol will show on the LCD and the battery need to be replaced with new one.

4.9 Calibration Point:

Room Temperature $23 \pm 3^{\circ}\text{C}$			
Input	Adjust VR	tolerance	
0°C	VR3	$\pm 0.1^{\circ}\text{C}$	
190°C	VR2	$\pm 0.1^{\circ}\text{C}$	
1000°C	VR1	$\pm 1^{\circ}\text{C}$	
190°F	VR4	$\pm 0.1^{\circ}\text{F}$	

Normally, performing offset Calibration with thermal stabled ice water through VR3 will give a very good calibration result.

OMEGA's On-Line Service Internal e-mail
www.omega.com info@omega.com

Servicing North America:

USA:
One Omega Drive, Box 4047
Stamford CT 06907-0047
Tel: (203) 359-1660
e-mail: info@omega.com

Canada:
976 Binger
Laval (Quebec) H7L 5A1
Tel: (514) 856-6728 FAX: (514) 856-6886
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For immediate technical or application assistance:
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TELEX: 996404 EASYLINK 62968934 CABLE: OMEGA
FAX: (001) 203-359-7807 e-mail: esp@omega.com
info@omega.com.mx

Mexico:
En Espanol: (011) 203-359-7803 e-mail: esp@omega.com

Benelux:
Postbus 8034, 1180 LA Amsterdam, The Netherlands
Tel: +31 (0)20 3472121 FAX: +31 (0)20 6434643
e-mail: info@omega.com

Czech Republic:
Rudé armády 1868, 233 01 Karišná 8
Tel: +420 (0)69 6311899 FAX: +420 (0)69 6311114
Toll Free: (0800-1-66342 e-mail: czech@omega.com

France:
9 rue Denis Papin, 78190 Trappes
Tel: +33 (0)1 30 62 1400 FAX: +33 (0)1 30 69 120
Toll Free in France: (0800-446342
e-mail: france@omega.com

Germany/Austria:
Daimlerstrasse 26, D-75392 Deckelfrom, Germany
Tel: +49 (0)7066 93984-0 FAX: +49 (0)7066 9398-29
Toll Free in Germany: (0800 639 7678
e-mail: germany@omega.com

United Kingdom:
One Omega Drive, River Bend Technology Centre
Northwick, Leam, Manchester
M14 5SD United Kingdom
Tel: +44 (0)161 777 6611 FAX: +44 (0)161 777 6622
Toll Free in United Kingdom: (0800-488-488
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